Spring 2020 USIE Seminars

Anthropology

**Anthropology of Beauty**

Student Facilitator: Doris Vidas | Faculty Mentor: Alan Page Fisk

What is beauty? Who decides? Exploration of human experience of aesthetic appreciation. Analysis of different facets of beauty through biological and cultural lens as means of examining universality and variability in its perceptions. Focus on holistic discussion of beauty. Discussion of human beauty. Focus on its more abstract forms such as art, performance, and nature. Draws from different disciplines such as history, biology, psychology, philosophy, sociology, and anthropology for multifaceted approach to subject. Case studies from diverse range of cultures to demonstrate variability that exists within cultural framework of beauty.

Architecture and Urban Design

**Introduction to Citizen Architecture: Exploring Architectural Methods for Social and Spatial Justice**

Student Facilitator: Derek Luu | Faculty Mentor: Dana Cuff

Hands-on architectural education while engaging with social issues. Introduction to fundamental procedures of architectural design, and also demonstration of how processes of designing, planning, and constructing has social implications for engaging with major contemporary urban issues. Exposure to positive design practices including group collaboration, creative problem solving, and reflection-based improvement. Exposure of danger and myth of architect as individual agent of ingenuity and expertise, and inherent conflict between individual and collective interests.

Art History

**Post-War Art in Los Angeles, 1957-1966**

Student Facilitator: Robert Hayden | Faculty Mentor: Miwon Kwon

Consideration of diverse network of artists and artistic practices in post-war Los Angeles. By focusing on art exhibitions that marked significant moments in city’s history, examination of role that galleries, museums, curators, scholars, publications, and collectors play in establishing art historical canon. No prior knowledge of art history is necessary.
Biomedical Research

**Molecular Biology in the 21st Century: Concepts & Techniques**

Student Facilitator: Carla Pantoja | Faculty Mentor: Ira Clark

“YOU ARE NOT THE FATHER!” The audience goes quiet and the cameraman chases the supposed father down the hall. You’ve probably chuckled at this all too familiar situation from the Maury Povich show, but how exactly do scientists determine paternity? What is DNA fingerprinting? Why are there blots named after cardinal directions and why do we care about stem cells being the future of regenerative medicine? In this seminar, we will utilize the central dogma as a framework to understand central molecular biology processes like DNA replication, transcription, and translation. Along the way, students will not only be introduced to cutting-edge molecular biology techniques researchers utilize on a daily basis, but also learn to critically interpret data. There will be an emphasis on understanding the logic and approach researchers use in answering life’s fundamental questions. To contextualize the topics of study, we will have the opportunity to discuss contested topics like CRISPR gene-editing and its implications for the future of regenerative medicine.

Chemical and Biomolecular Engineering

**Diamonds in the Rough: Genome Mining for New Therapeutics**

Student Facilitator: Alexander Soohoo | Faculty Mentor: Yi Tang

Overview of natural product discovery and development into medicines. Exposure to sequencing, genetic editing, and recombinant biology, and associated ethical implications. Discussion of current state of biotechnology and pharmaceutical industries. Designed to provide an overview on the field of genome mining, insight into laboratory research and pharmaceutical development, and a perspective on the process of discovering and developing natural product medicines.

Chicano/a Studies

**20th Century El Salvador: the Lucha for an Egalitarian Society**

Student Facilitator: Saraí Victoria Kashani | Faculty Mentor: Leisy J. Abrego

Focusing on the 1930s through the 1970s, this course surveys the historical, social, political, and economic conditions that stimulated the Salvadoran Civil War in 1980. Paying special attention to the intersections of race, ethnicity, class, and gender, this class also examines how Salvadorans have countered erroneous depictions of themselves as “passive agents”
through various forms of activism, such as through peasant mobilizations and political education. As active agents of change, Salvadorans have actively and continuously battled colonial legacies, U.S. intervention and imperialism, and the consequences of neo-liberal policies. These transnational efforts encompass a strong legacy of egalitarian efforts that can be historically traced.

Computer Science

**Understanding Technology in Modern Society**

Student Facilitator: Yvonne Chen  |  Faculty Mentor: Ryan Rosario

In today's technology-dominated society, it is more important than ever for anyone, regardless of their chosen career, to understand the mechanisms behind how many common technologies function. As society continues to make advances in artificial intelligence, biomedical engineering, or hardware and virtual reality, the gap between what the average person knows about their day-to-day technology-based services and what there is to know only continues to widen. This seminar aims to give nontechnical students a holistic overview of technology's core concepts: to think through the basics of how it works, why it was made the way it was, how it generates money, and what kind of social consequences it produces.

**Introduction to AI Ethics - An Interdisciplinary Approach**

Student Facilitator: Aaron Hui  |  Faculty Mentor: Ryan Rosario

As technology advances at an exponential rate, it is imperative that students begin thinking about how Artificial Intelligence (AI) will interact with and impact society at different facets of daily life, with the focus on ethical implication and its implementation within AI systems. The foresight of how important it is to regulate AI through the lens of ethical discussion and implementation is of paramount significance within the setting of the rapid development of AI and how it has already permeated our daily lives.

This course will allow students to gain an interdisciplinary introduction to classical and modern ethical theory and their implications on emerging autonomous technologies. The course will focus on the six ethical principles of AI identified by Microsoft: Fairness, Inclusiveness, Reliability, Transparency, Privacy, and Accountability.

This course will include introductions to the AI Robotics Ethics Society (AIRES), the UCLA Law AI Pulse program, the AI Ethics Lab, the USC Center for Artificial Intelligence in Society (CAIS), and more.
Economics

**Deviations from Rationality: An Introduction to Behavioral Economics**

Student Facilitator: Isabella (Izzy) Sumner | Faculty Mentor: Pierre-Olivier Weill

Have you ever made a decision on a gut feeling? Should you trust your gut?

When most students hear the term ‘economics,’ they envision complicated formulas that model rational thought. Yet, there is an entire field of economics that is dedicated to studying irrational behavior. Behavioral economics uses methodologies to analyze how psychology affects people’s economic behavior and decision-making processes. This course will examine how cognitive biases can influence—and often inhibit—people’s reasoning abilities. It will also introduce basic economic modeling to provide a framework for thinking about rational and irrational thought.

Electrical and Computer Engineering

**Black Mirror: Technology and its Role in Dystopian Societies**

Student Facilitator: Daniel DongChan Ahn | Faculty Mentor: Vwani Roychowdhury

Technology has become an increasingly integral part of our lives. As we grow more dependent on it, we should consider its negative effects and how those effects may come to have unintended consequences in the future. In particular, we should be familiar with the role technology plays in the formation and perpetuation of dystopian societies. In this course, we will critically examine technologies presented in episodes of Black Mirror and the effects they have on the societies built around them. The course will be organized into units covering aspects of society that are similarly effected by runaway technology. By understanding scenarios in which these technologies are abused or cause unintended consequences for their users, we hope to be able to think about how these situations can be avoided in real life and identify parallels with current issues in technology.

Ethnomusicology

**The Artistry of J. Cole**

Student Facilitator: Jason Frost | Faculty Mentor: Cheryl Keyes
Jermaine Lamar Cole, known professionally as J. Cole, is an American rapper, singer, songwriter and record producer. This course seeks to analyze J. Cole’s personal background, creative process in writing and producing, and messaging to determine the extent to which his artistry is unique from his contemporaries. Discussion will be focused on J. Cole’s upbringing and artistic influences, forms of expression, meaning and emotional impact of music, and other aspects of his discography. By the end of the course, students will have a better understanding of the intellectual complexities and nuances of J. Cole’s music and hip hop in general.

Film and TV

**Teen TV**

Student Facilitator: Alexandra Kukoff | Faculty Mentor: Becky Smith

An examination of how teen shows have evolved and what kind of social impact they have on the world at large. Students will watch and discuss clips from Euphoria, Gossip Girl, Skins, the OC, Awkward., My Mad Fat Diary, Elite, and Riverdale among others.

Geography

**Evaluating Cosmopolitanism**

Student Facilitator: Samantha Wieske | Faculty Mentor: Eric Sheppard

Cosmopolitanism is a political philosophy: the notion that every human is a part of a single community with a shared morality. As the international community has become increasingly globalized, cosmopolitan rhetoric has often been employed as a means to reduce inequalities and maintain peace. In his 1971 song, ‘Imagine,’ John Lennon implored the world to “Imagine there’s no countries... Imagine all the people sharing all the world” — what if we did just that?

Taken to its furthest extent, cosmopolitanism would entail the elimination of national boundaries and complete global governance; however implausible that reality may seem, cosmopolitan ideologies inform modern international policies and underpin globalization. Cosmopolitan ideals are seen in real world applications through treaties like the Declaration of Human Rights, and organizations like the United Nations and the International Monetary Fund. Throughout this quarter, students will be examining the topic cosmopolitanism, through various academic lenses.
History

The History of the Modern Romance Novel

Student Facilitator: Lawrence Myung | Faculty Mentor: Debora Silverman

This course will discuss the history of the modern romance novel. Everything from Jane Austen to Fanfiction will be subject to study in this course. It is a history, which will not require students to read entire novels. Instead, we will use romance novels to understand broader historical trends like changes in gender roles. We will first examine the rise of the romance novel from the eighteenth to the twentieth century. From this, we will see the inclusion of other marginalized groups (based on class, sexuality, and race) in the romance novel genre through the late twentieth century, analyzing its shortcomings and future. Finally, we will take a closer look at modern romance novels, which will culminate in collaborative group projects that aim to derive further insight from the romance novel genre. For a long time, the romance genre has been dismissed by academics and society alike, which we aim to explore and rectify.

Institute of the Environment and Sustainability

Collaborative Cooking: Recipes for Social Justice

Student Facilitator: Sienna Rohrer | Faculty Mentor: James Bassett

What becomes possible in the world when we cook and eat together? What power does a cookbook have in making the world a more just place? This hands-on, experiential course explores the role of collaborative cooking and meal sharing in building social connection and activism. The course begins with an exploration of individual identities and an appreciation for the land that sustains us through food. Students choose a recipe in the beginning weeks of the quarter that has particular meaning to them, and we cook, reflect on, analyze, critique, and celebrate this recipe in discussions and reflections throughout the quarter. The sharing and cooking of these recipes is complimented and complicated by class discussions centered on: fostering social connection, resistance, and activism through cooking. The course culminates in a collaborative recipe book that imagines cooking an art as forms of activism and storytelling, composed of the recipes students have shared and cooked together throughout the quarter.
Medicine

**The world's worst kept secret - Neglected Tropical Disease**

Student Facilitator: Alexis Elliott | Faculty Mentor: Claire Panosian

This course will serve as an introduction to Neglected Tropical Diseases (NTDs), a group of infections that particularly affect low-income countries and impose a major burden on human health and productivity, while at the same time attracting relatively scarce resources and attention from the global community. The material in this course is appropriate for students in ALL majors (not just STEM) and will not only cover factual information about the diseases, but also the psychologic and social consequences of them. Overall this class will allow students to think critically about the complexity of the problem NTDs pose and to analyze why they are ‘neglected’. Until the final two weeks of the course, each weekly session will focus on one particular NTD and one common theme among these infections; during the last two sessions, students will present their final (group-assigned) projects covering certain NTDs not previously discussed in class.

Musicology

**Psychomusicology: How Music and the Brain Create Our Experienced Reality**

Student Facilitator: Laine Gruver | Faculty Mentor: Elizabeth Upton

This course aims to shift the way we often think about music, moving from perceiving music as something that exists within the boundaries of our reality to something that pushes and redefines those boundaries. We will explore the ways in which music augments human reality through neuroscientific, psychological, and aesthetic lenses. Course subject matter is interdisciplinary and includes the intersections of music with neuroanatomical vision and audition, neurological disease, psychology, animation, film, and nature. We will analyze media ranging from modern indie songs, to classic Disney animations, to renowned film scores. In addition to artistic media, we will discuss scientific writings about music and the brain to examine how the junction of art and science creates a unique learning space with clinical implications. Students will walk away from the class with a new holistic appreciation for how the music they have always listened to has in fact subconsciously shaped their lives.

Psychiatry and Behavioral Sciences

**Psychedelic Drugs: From Molecular Biology to Society**
Exploration of various hallucinogens, including classical psychedelics such as LSD, Psilocybin, DMT/Ayahuasca, Mescaline/Peyote, 25i-NBOMe; dissociatives such as Ketamine, PCP, Salvia divinorum, DXM; other hallucinogens such as frog skin, Ibogaine, nitrous oxide, MDMA, Cannabis, 2C-B. Discussion of history and origins; mechanism in brain; metabolism; physiological, physical, and sensory effects; risks and tolerance; therapeutic, spiritual, and recreational use; sociocultural impact; laws and regulations; and student opinions on hallucinogens.

Psychology

**College Students and Noncommitment: Is Hookup Culture Changing Modern Romance?**

Student Facilitator: Gillian Borges | Faculty Mentor: Benjamin Karney

Examination of hookup culture and its effect on college campuses through use of psychological research. Exploration of hookup culture development, participation, effect on different student groups, connection with sexual assault and rape culture, and if/how hookup culture has changed relationships for college students in the present and their futures.

Slavic, East European and Eurasian Languages and Cultures

**Environmental Policy of the Soviet Union and Modern-Day Implications**

Student Facilitator: Rowan Baker | Faculty Mentor: Daniel Posner

What comes to mind when you think about the Soviet Union? Communism? Maybe Russia? And what about the environment and the Soviet Union? Perhaps something along the lines of HBO’s Chernobyl? These, of course, would be reasonable to think about. But what about the far less traversed intersectional concepts and concerns of communism, the Soviet Union, and the environment? Ever heard of Semipalatinsk, the Holodomor, or the Aral Sea? If not, you are in the right place!

In this course, we will explore beyond the borders of Russia to examine the former Republics of the Soviet Union through the lens of Soviet environmental policy. We will focus on some of the greatest environmental disasters that occurred during the Soviet Union and their present-day impacts on the modern countries in which they occurred,
from the Baltic Sea to the Kazakhsteppe, and from the Siberian tundra to the southern deserts of Central Asia. Finally, we will do so through an analysis of some of the most pressing issues concerning the environment, ranging from nuclear fallout to indigenous rights.

Writing Programs

**Wibbly Wobbly Timey Wimey- An Analysis of the Role of Science Fiction Within Society**

Student Facilitator: Hatim Malek | Faculty Mentor: Tara Prescott Johnson

Despite very rarely being examined within an academic setting, the science fiction genre is extremely important due to its analysis of society and humanity. This class is centered around teaching students how to approach science fiction analytically in order to understand the big themes present within the genre, as well as how works choose to approach those themes.

Students will be exposed to a variety of science fiction works in a multitude of mediums including literature, television, film, anime, podcasts, and video games. The class will be divided into three large sections. The first section will have students learning what it means for a work to be science fiction. When building a fictional world, what are the different ways that science fiction can be used? In the second section, students will be shown how the science fiction genre comments on the broader social issues present within society. Finally, in the last section of the class students will be given the opportunity to explore some of the key themes present within most science fiction works.